

IN THE CLAIMS:

Please cancel claims 1 – 5, 7 – 10, 17, and 19 - 24 without prejudice.

Please add new claims 1 – 40.

Full 1.126 25
91
1. (New) A method of manufacturing an electronic thermometer comprising the steps of:

treating a first portion of a surface of an injection molding die of an injection molding system through an etching process;

leaving a second portion of the surface of the injection molding die in an untreated state;

introducing a transparent plastic material into the injection molding system to be formed into a housing of the electronic thermometer comprising an outer surface, inner surface, and cavity;

forming the housing with the injection molding system such that the material molded by the first portion of the surface of the injection molding die is non-transparent with respect to the material molded by the second portion of the surface of the injection molding die, the material molded by the second portion of the surface constituting a viewing area that is integral with the housing;

removing the housing from the injection molding system;

inserting a digital display within the cavity;

positioning the digital display so that it is visible through the viewing area; and

attaching a metal tip to one end of the housing.

26
2. (New) The method of claim 1²⁵ wherein the material is polycarbonate.

- ²⁷
3. (New) The method of claim ²⁵1 further comprising the steps of:
- inserting a temperature sensor within the metal tip;
- attaching the temperature sensor through one or more lead wires to the digital display;
- inserting into the housing an electronic circuit to process temperature data measured by the temperature sensor; and
- welding into the housing a battery for providing power to the electronic circuit and digital display.
- ²⁸
4. (New) The method of claim ²⁵1 wherein the viewing area and digital display are essentially congruent.
- ²⁹
5. (New) The method of claim ²⁵1 wherein the etching process comprises mechanically etching the first portion of the injection molding die.
- ³⁰
6. (New) The method of claim ²⁵1 wherein the etching process comprises chemically etching the first portion of the injection molding die.
- ³¹
7. (New) The method of claim ²⁵1 wherein the metal tip is glued to the housing.
- ³²
8. (New) The method of claim ²⁵1 wherein the injection molding system is configured so that the first portion of the surface of the injection molding die imparts a roughened texture to the

inner surface of the housing such that the viewing area molded by the second portion of the surface of the injection molding die is relatively transparent to the remainder of the housing.

²⁵
39 (New) The method of claim 1 wherein the injection molding system is configured so that the first portion of the surface of the injection molding die imparts a roughened texture to the outer surface of the housing such that the viewing area molded by the second portion of the surface of the injection molding die is relatively transparent to the remainder of the housing.

²⁴
10. (New) A method of manufacturing an electronic thermometer comprising the steps of:
treating a surface of an injection molding die of an injection molding system through an etching process;

introducing a transparent plastic material into the injection molding system to be formed into a housing of the electronic thermometer comprising an outer surface, inner surface, and cavity;

forming the housing with the injection molding system such that the material molded by the surface of the injection molding die is non-transparent;

removing the housing from the injection molding system;

polishing a portion of a surface of the housing to produce a viewing area that is transparent with respect to the material molded by the surface of the injection molding die, the viewing area being integral with the housing;

inserting a digital display within the cavity;

positioning the digital display so that it is visible through the viewing area; and

attaching a metal tip to one end of the housing.

³⁵
11. (New) The method of claim ³⁴10 wherein the material is polycarbonate.

³⁶
12. (New) The method of claim ³⁴10 further comprising the steps of:
inserting a temperature sensor within the metal tip;
attaching the temperature sensor through one or more lead wires to the digital display;
inserting into the housing an electronic circuit to process temperature data measured by
the temperature sensor; and
welding into the housing a battery for providing power to the electronic circuit and digital
display.

³⁷
13. (New) The method of claim ³⁴10 wherein the viewing area and digital display are
essentially congruent.

³⁸
14. (New) The method of claim ³⁴10 wherein the etching process comprises mechanically
etching the injection molding die.

³⁹
15. (New) The method of claim ³⁴10 wherein the etching process comprises chemically
etching the injection molding die.

⁴⁰
16. (New) The method of claim ³⁴10 wherein the metal tip is glued to the housing.

⁴¹~~41~~ (New) The method of claim ³⁴~~10~~ wherein the injection molding system is configured so that the etched surface of the injection molding die imparts a roughened texture to the inner surface of the housing such that the viewing area produced in the polishing step is transparent relative to the remainder of the housing.

⁴³~~43~~ (New) The method of claim ³⁴~~10~~ wherein the injection molding system is configured so that the etched surface of the injection molding die imparts a roughened texture to the outer surface of the housing such that the viewing area produced in the polishing step is transparent relative to the remainder of the housing.

⁴⁸~~48~~ (New) A method of manufacturing an electronic thermometer comprising the steps of:

introducing a transparent material into an injection molding system to be formed into a housing of the electronic thermometer, the housing comprising an outer surface, inner surface, and cavity;

roughening a first surface area of the inner surface of the housing to impart an opaque finish to the transparent material that renders objects within the cavity to be non-visible through the housing;

leaving a second surface area of the inner surface of the housing unroughened to create a display window that renders objects within the cavity to be visible through the housing, the display window being integral with the housing;

removing the housing from the injection molding system;

inserting a digital display within the cavity;

positioning the digital display so that it is visible through the viewing area; and
attaching a metal tip to one end of the housing.

⁴⁴20. (New) The method of claim ⁴⁴19 wherein the roughening step comprises mechanically etching at least a portion of an injection molding die used in the injection molding system to form the inner surface of the housing.

⁴⁵21. (New) The method of claim ⁴⁵19 wherein the roughening step comprises chemically etching at least a portion of an injection molding die used in the injection molding system to form the inner surface of the housing.

⁴⁶22. (New) The method of claim ⁴⁶19 further comprising the steps of:
inserting a temperature sensor within the metal tip;
attaching the temperature sensor through one or more lead wires to the digital display;
inserting into the housing an electronic circuit to process temperature data measured by the temperature sensor; and
welding into the housing a battery for providing power to the electronic circuit and digital display.

⁴⁷23. (New) The method of claim ⁴⁷19 wherein the viewing area and digital display are essentially congruent.

⁴⁸24. (New) A method of manufacturing an electronic thermometer comprising the

steps of:

introducing a transparent material into an injection molding system to be formed into a housing of the electronic thermometer, the housing comprising an outer surface, inner surface, and cavity;

roughening the inner surface of the housing to impart an opaque finish to a first portion of the transparent material that renders objects within the cavity to be non-visible through the housing;

removing the housing from the injection molding system;

polishing part of the first portion to create a second portion of the inner surface of the housing, the second portion constituting a display window that renders objects within the cavity to be visible through the housing, the display window being integral with the housing;

inserting a digital display within the cavity;

positioning the digital display so that it is visible through the viewing area; and

attaching a metal tip to one end of the housing.

⁴⁹
25. (New) The method of claim ⁴⁸~~24~~ wherein the roughening step comprises mechanically etching a surface of an injection molding die used in the injection molding system to form the inner surface of the housing.

⁵⁰
26. (New) The method of claim ⁴⁸~~24~~ wherein the roughening step comprises chemically etching a surface of an injection molding die used in the injection molding system to form the inner surface of the housing.

~~51~~
~~27.~~

(New) The method of claim ~~24~~⁴⁸ further comprising the steps of:

inserting a temperature sensor within the metal tip;

attaching the temperature sensor through one or more lead wires to the digital display;

inserting into the housing an electronic circuit to process temperature data measured by the temperature sensor; and

welding into the housing a battery for providing power to the electronic circuit and digital display.

~~52~~
~~28.~~

(New) The method of claim ~~24~~⁴⁸ wherein the viewing area and digital display are essentially congruent.

~~53~~
~~29.~~

(New) An electronic thermometer comprising:

a temperature sensor;

an electronic circuit coupled to the temperature sensor to process temperature data measured by the temperature sensor;

a display element coupled to the electronic circuit to display a temperature corresponding to the temperature data measured by the temperature sensor;

an integral housing enclosing the electronic circuit and display element, and formed of a transparent material, the housing having

an inner surface and an outer surface, — show

show a first surface area disposed proximate the display element, and with a first surface roughness on at least one of the inner and outer surface, wherein the first surface

roughness is low enough to render the display element to be visible through the housing,

and

short *of surfaces relat.*
a second surface area with a second surface roughness on at least one of the inner and outer surface, wherein the second surface roughness is greater than the first surface roughness and high enough to allow only diffuse light to shine through the housing and thereby render the electronic circuit to be less visible than the display element through the housing; and

a metal tip attached to a tapered end of the housing and enclosing the temperature sensor.

Confusing
⁵⁴30. (New) The electronic thermometer of claim ⁵³29 wherein the second surface area is produced by etching a first portion of an injection molding die used in an injection molding system utilized to form the housing.

Confusing
⁵⁶31. (New) The electronic thermometer of claim ⁵⁴30 wherein the first surface area is produced by leaving a second portion of the injection molding die in an un-etched state.

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⁵⁶32. (New) The electronic thermometer of claim ⁵⁴30 wherein the first portion of the injection molding die is produced by mechanical etching of the injection molding die surface. LAB

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⁵⁴33. (New) The electronic thermometer of claim ⁵⁴30 wherein the first portion of the injection molding die is produced by chemical etching of the injection molding die surface. LAB

⁵⁸
34. (New) The electronic thermometer of claim ⁵³29 wherein the first surface area is produced by polishing a sub-portion of the second surface area to reduce the second surface roughness to the first surface roughness of the first surface area.

⁵⁹
35. (New) The electronic thermometer of claim ⁵³29 further comprising a battery welded into the housing to provide power to the electronic circuit and display element.

⁶⁰
36. (New) The electronic thermometer of claim ⁵³29 wherein the first surface area and display element are substantially congruent.

⁶¹
37. (New) The electronic thermometer of claim ⁶⁰36, further comprising a cover part, wherein the housing and the cover part are each produced in one piece from transparent plastic material. L AD

⁶²
38. (New) The electronic thermometer of claim ⁶⁰36, wherein the display element includes an LCD display.

⁶³
39. (New) The electronic thermometer of claim ⁶²38 further comprising a switch coupled to the battery and the electronic circuit.

⁶⁴
40. (New) The electronic thermometer of claim ⁵³29, wherein the main part and the cover part are made from polycarbonate.
